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TWO NEW SPECIES OF SCIAPHILA.

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The small family of saprophytic Monocotyledons known as the Triuridaceae is represented in America by about 13 species, divided among two genera (*Sciaphila* and *Triuris*) by Bentham & Hooker and by Engler. Dr. Karl Schumann, in his monographic treatment of the American representatives of the family in the Flora Brasiliensis (3[3]:645–668. *pl. 116–117.* 1894), recognized also two other genera (*Soridium* Miers and *Peltophyllum* Gardn.). The principal American genus is *Sciaphila,* of which 7 species (8 if *Soridium* be included) are described by Schumann. The only new species described since Schumann's work is *S. richardi* Baill. (Bull. Soc. Linn. Paris 2:1189. 1895), a remarkable plant from tropical America (French Guiana?). In the present paper two new species are described, both collected by Mr. Henry Pittier. One, from Venezuela, is of interest from its close relationship to *Sciaphila spruceana* (Miers) Engl., which has hitherto constituted a monotypic group (the genus *Soridium* of Miers); the other, from Panama, is the first species of the genus found in the New World outside of South America. A note is added regarding *Sciaphila picta* Miers, to which are apparently to be referred specimens collected in Panama by Mr. Pittier.

Sciaphila brevipes Blake, sp. nov.

Roots pilose; pedicels 1.3 mm. long or less, much shorter than the bracts, these about equaling the flowers; perianth in both sexes 4-parted, 2.8–4 mm. wide, the segments ovate, acute, papillose on margin; stamens 2, sessile; fruit indehiscent, 1 mm. long, papillose especially above, yellowish; seed fuscous-brown.

Rhizome not seen; roots slender, about 1 cm. long, densely pilose with whitish hairs; plant 5.5–10.5 cm. high, the stem simple or sometimes with a

sub-basal branch, whitish, slender, 0.5–0.8 mm. thick, glabrous, usually flexuous at base; leaves chiefly below middle of stem, few, scattered, triangular to triangular-ovate, acute to acuminate, 1.5–2.2 mm. long, fleshy, glabrous; raceme 12–15 mm. long, 2.5–4 mm. wide, 9–11-flowered, the lowest flowers remote, the others crowded, the lower 5–7 flowers ♀, the others ♂; bracts narrowly triangular, acuminate, decurved, glabrous, with purplish-brown spots toward apex, the lower 2.5–2.8 mm. long, the upper 1.5 mm. long; pedicels of the ♀ flowers stout, erect or spreading even in fruit, 0.5–0.8 mm. long (in fruit 1–1.3 mm.); ♀ perianth 3.6–4 mm. wide, spreading in anthesis, reflexed in fruit, greenish (when dry), the segments suborbicular-ovate or ovate, 1.8–2 mm. long, 0.8–1.3 mm. wide, acute or acutish, sometimes apiculate, united at base for about 0.3 mm.; carpels about 35, densely papillose, about 0.4 mm. long, the styles sub-basilar, subcapitate and tufted at apex, from slightly shorter to slightly longer than the ovaries; pedicels of the ♂ flowers 0.5–1 mm. long, erectish or spreading; ♂ perianth similar to the ♀ but smaller, 2.8–3.2 mm. wide, the segments papillose on margin, sometimes with 2 or 3 short hairs at apex; stamens oblong, 0.6 mm. long, 0.3 mm. high; fruit oval-obovoid, 0.7 mm. wide, papillose except on the sides below, apparently indehiscent, about twice as long as the more or less persistent style.

Venezuela: A saprophyte, along Lora River, on high hill above Camp 2, Perijá Exploration Company, State of Zulia, 14 Dec. 1922, *Pittier* 10953 (type no. 1,187,489, U. S. Nat. Herb.).

This curious little plant is a close relative of *Sciaphila spruceana* (Miers) Engl., differing primarily in its very short pedicels, considerably surpassed by the bracts. *S. spruceana*, which has hitherto been unique, at least among American species, in its indehiscent fruits, constantly 4-parted perianth, and diandrous ♂ flowers, was originally described by Miers as the type of his genus *Soridium*. Although reduced to *Sciaphila* by Bentham & Hooker, who were followed by Engler, *Soridium* was reinstated as a genus by Schumann in his treatment of the family in the Flora Brasiliensis. Examination of the features mentioned as diagnostic by Schumann shows that the two groups are unequivocally distinct only in the character of the fruit (indehiscent in *Soridium*, dehiscent in *Sciaphila*). In all other respects they are so closely allied that their continued separation on the basis of this difference alone is scarcely warranted.

Sciaphila panamensis Blake, sp. nov.

Roots pilose; pedicels of the ♀ flowers 2.5–4 mm. long, about twice as long as the bracts, of the ♂ flowers 1.5–3 mm. long, surpassing the bracts; ♀ perianth 6-parted, the segments ovate, acute, papillose on margin, 1.8–2 mm. long, reflexed in fruit; ♂ perianth 6-parted, the segments ovate or lance-ovate, acutish, 1.5 mm. long; stamens 3, subsessile; fruit obovoid, 1.5 mm. long, 0.7 mm. wide, whitish, slightly papillose above, dehiscent.

Rhizome (imperfect) slender, whitish; roots slender, scattered, about 1.2 cm. long; plant 8–11 cm. high, the stem simple or rarely with a branch near middle, slender, flexuous, whitish, glabrous, obscurely striate; leaves about 3–6, scale-like, triangular, acutish to acuminate, brownish, glabrous,

1–2 mm. long; raceme 1.2–3.5 cm. long, 7–8 mm. wide, about 12–27-flowered, the lowest flowers subremote, the lower 6–10 flowers ♀, the others ♂; bracts narrowly triangular, acuminate, with purplish glandular thickenings on margin, the lower 2–2.5 mm. long, the upper 1.5–2 mm., all spreading or applied to the pedicels, essentially free; pedicels of the ♀ flowers spreading or ascending, recurving at apex in fruit, stoutish, always surpassing the bracts and usually about twice as long; ♀ perianth 3.5–4 mm. wide, greenish white (when dry), the segments 0.6–0.8 mm. wide, united at base for about 0.4 mm., spreading in anthesis, not tufted at apex; carpels about 25, in anthesis about half as long as the basilar style, this papillose-fringed nearly throughout; pedicels of the ♂ flowers slender, sometimes twice as long as the bracts, spreading or erectish, essentially straight; ♂ perianth 2.5 mm. wide, the segments 0.5 mm. wide, united at base for about 0.3 mm., spreading, greenish white, papillose on margin, not pilose-tufted; stamens 0.7 mm. long, 0.3 mm. high; fruit apparently dehiscent dorsally; seed pale brown, 1.2 mm. long.

Panama: A saprophyte, in forests around Puerto Obaldia, San Blas coast, alt. 0–50 m., August, 1911, *Pittier* 4290 (type no. 679403, U. S. Nat. Herb.).

This species, the first of the genus found north of Venezuela, is nearest *Sciaphila albescens* Benth., of the Province of Alto Amazonas, Brazil. In that plant, according to Schumann's description, the pedicels are considerably longer (4–6 mm. in the ♂ flowers, 4–8 mm. in the ♀), and the fruits are 2 mm. long.

Sciaphila picta Miers, Trans. Linn. Soc. 21:48. *pl. 6, f. 13–18.* 1852.

Included with the material on which *S. panamensis* is based were two specimens differing decidedly from that species in the purplish color of the inflorescence, the more numerous flowers, all staminate and on strongly decurved pedicels, and the smaller, reflexed, purple perianths, their segments with long apical tufts of hairs. It seems best for the present to refer these to *S. picta* Miers, although they may prove distinct when that plant is better known. Through the kindness of Dr. A. W. Hill, Director of the Royal Botanic Gardens at Kew, I have been able to examine an original specimen of *S. picta* collected by Wm. Purdie. Dr. Hill informs me that the locality given by Miers ("in Venezuela, ad fluv. Opure") is erroneous, and that the correct locality is "in woods of the Opon River, Santander, Colombia." The Opon is a tributary of the Magdalena, about 6° or 7° N., between the rivers Carare and Sogamoso, and rises near Velez. The specimen sent bears so few flowers in good condition that I have not felt at liberty to dissect any. A small fragment examined of an imperfect flower seems to agree fairly well with Miers' figures. Miers' description is probably erroneous in some particulars, and there are discrepancies between his illustrations and text. The species is described as with flowers "hermaphroditis (an semper?)," but the figures show "a single male flower" (fig. 14, 15) and "a female flower" (fig. 16). Figures 15 and 16 look essentially alike and seem to be normal pistillate flowers. The perianth segments

are shown as ovate or ovate-triangular, acute, subequal in length, and about half as wide as long. Schumann, although stating that this is the only South American species of which he was unable to examine a specimen, nevertheless gives the dimensions of the segments as 1 mm. by 0.2–0.3 mm., which does not agree with Miers' figures. In Pittier's plants the segments are narrowly triangular and alternately unequal, those opposite the stamens 1.5 mm. long, 0.4 mm. wide at base, the others 1.2 mm. long. Until more specimens are available it is best to refer Pittier's plants tentatively to *Sciaphila picta* Miers.